

## ABSTRACT

It is an object of the present invention to provide a substrate body-floating apparatus which insures a stable floating state of a substrate body with less vibration of a rotation axis or a surface thereof and a heater and a film-forming apparatus capable of forming a homogeneous film without losing cleanliness of a surface of a substrate body and with small temperature gradation on a surface of a substrate body as well as small density gradation of a raw material used for forming a film on a substrate body in a wide area.

The substrate body-floating apparatus according to the present invention has a floating unit for floating and rotating a disk-shaped substrate body by blowing an air flow to a rear surface of the substrate body, the floating unit comprising a group of fine pores for floating the substrate body, a group of fine pores for fixing the substrate body at a center of the apparatus, a group of fine pores for rotating the substrate body at a center of the apparatus, and a group of auxiliary fine pores for suppressing vibration of the substrate body when the substrate body is rotated at a high speed. Also the substrate

body-floating type of heater and film-forming apparatus have the floating unit described above respectively.